

**GPS-MINI 940  
&  
TX WRD**

ENJOY LIFE, ENJOY DRIVER

**GPS-MINI 940 &  
TX WIRELESS RADAR  
DETECTOR (TX WRD)**



**GPS USER MANUAL**

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**Operation Notice Safety Warning Systems**

Thank you for buying your GPS-MINI 940 & TX Wireless Radar Detector. This model is mainly designed for Radar, Laser and Safety Warning System detection and alert. You should be aware that Safety Warning transmitters (the device that alerts your detector for safety warning alerts) will be available for use in the areas of Western European, USA, China, Brazil, Taiwan and Australia. However, these transmitters may not be used in those areas without their databases. The GPS-MINI 940 & TX WRD is not designed to help you break the law. Safe drivers are always reminded to remain alert for road hazards and obey the posted speed limit and legal driving methods at all times.

The GPS signal reception could be affected by some factors such as the location of satellites, tall buildings, bridges, and tunnels etc. If the GPS speed camera locator (GPS-MINI 940) is not receiving a signal, you will need to adjust your location until a signal is received or use the external GPS antenna.

For the best GPS signal reception, the GPS-MINI 940 should be mounted on the lower part of the windshield because the unit will only receive signals from satellites which have an elevation above the horizon of 5 degrees or more.

\* It is not recommended that drivers change any settings during the driving because of safety reasons. If it is necessary to adjust the setting, please make it when coming to a full stop or have a passenger do it.

\* The US Government operates and maintains the Global Positioning System. Moreover, the US government reserves the right to make changes to the system in accordance with the Department of Defense civil GPS user policy and the Federal Radio navigation plan. These changes along with poor satellite geometry could cause inaccurate readings. The US government is responsible for the accuracy of the system.

\* This device is an excellent navigator; however, it does not substitute the need for common sense and good judgment.

\* The GPS-MINI 940 as a road safety enhancement device provides all information for reference only. Users assume all responsibilities and risks when operating this product.



## GPS Constrction

### SIDE VIEW



#### MINI USB

To receive the MINI USB download cable.

#### Note:

The GPS-MINI 940 comes with pre-loaded thousands of safe camera locations including red light and fixed position speed cameras. The GPS-MINI 940's safe camera database and operating software can be easily updated by using a MINI USB download cable to a computer.

**ANT**  
To receive the external antenna.

**DC 12V**  
To receive the DC 12V connector of ON/OFF switch power cord.



#### SPEAKER

This unit features three methods of alerting you that the detector has received a signal: Audible alerts, Visual alerts, and Vocal alerts.

## GPS Constrction

The GPS-MINI 940 uses a Geiger-counter-like sound to indicate the signal strength and type of radar signal being encountered. When you encounter radar, a distinct audible alert will sound and occur faster as the signal gets stronger. When the signal is very strong, the audible alerts will blend into a solid tone. Each band has a distinct tone for easy identification.

### FRONT VIEW



#### MODE Button

The functions can be set up or changed by pressing the MODE button.

#### MEMO Button

To enter Program Mode, press and hold the MOD button for 3 seconds.

There are four options:

1. Camera Speed Limit Mode
2. Safe Driving Mode
3. Camera Mode
4. Safe Driving Speed Limit Mode

#### UP / DN Button

In the status of SET function, you can select the settings by pressing the UP and DN buttons.

#### Note:

- \* To change the volume level, press the UP or DN button for 1 second.
- \* To change the sensitivity level, press the UP or DN button for 3 seconds.



## GPS Constrction

### FRONT VIEW



### FND (Flexible Numeric Display)

The FND of GPS-MINI 940 consists of one individual compass LEDs to provide an intuitive ultra-bright display of direction and text messages and one timer LED's to provide extra display of speed and time text messages. When radar is detected, the FND shows the band (X, K, Ku, Ka or L) and a precise bar graph of the signal icons. When the GPS-MINI 940 detects laser, the display will show "L".

### REAR VIEW



## Simple Quick Operation

To begin using your GPS-MINI 940, just simply follow the following steps:

Step 1. The ON/OFF switch power cord has two ends. Plug the small end which is a DC connector into the side Jack of GPS-MINI 940 and plug the large end which is an ON/OFF switch into the socket of cigarette lighter.



Step 2. Mount your GPS-MINI 940 on the windshield by using the bracket with suction cups or place it on the desk by using the magnet.



Step 3. Press the power button on the large end of ON/OFF switch power cord to turn on the power, and then the LED light will be ON.



Step 4. Insert the GPS-MINI 940's adjustable Windshield mount into this slot or paste the magnet on the car's desk, and then place the unit on the top of magnet.



## GPS-MINI 940 + TX WRD

### TX Wireless Radar Detector Installation

#### • GPS-MINI 940

Mount the GPS-MINI 940 on the windshield next to the right side of rearview mirror. The unit must have a clear view through the windshield, be parallel to the road and have a clearance to snap into the "up" position. Position the unit for an easy access to power switch, cable connections and for an easy mirror movement.

#### IMPORTANT:

Do not block the GPS-MINI 940 lens with the sun-shaded area of the windshield.

Heated windshields currently are available on some vehicles such as Ford's Instaclear and GM's Electricear which may block or weaken incoming signals. Consult your automobile manufacturer for more information.

If you are in the areas where mounting any object on the windshield is prohibited according to the law, please mount the GPS-MINI 940 on the dashboard.

#### 1. Position the GPS-MINI 940 unit before mounting.

- Clear the bracket position of the window or the magnet position of the desk.
- Refill and Adjust bracket.
- Hold the unit in place.
- Adjust the GPS-MINI 940 unit to a position which is parallel to the road. (horizontal position)

#### 2. Plug the ON/OFF switch power cord to the GPS-MINI 940 unit

- Use power cord to route to fuse box or lighter/accessory outlet.
- Plug in the power cord.
- Turn on the power by pressing the red button on the power cord. Then, the red light will be ON.

#### 3. Peel off the film from the display of the GPS-MINI 940 unit

- To activate the vehicle
- Check the icon of flash "W" to see if the GPS-MINI 940 and TX WRD units connect properly.

## CONQUEROR SERIES

### TX Wireless Radar Detector Installation

#### 4. GPS-MINI 940 Initial Satellite Lock; GPS-MINI 940 module now needs to detect the Global Positioning satellites.

- With vehicle running and parked in an area clear of obstructions to the sky, turn on the power to the GPS-MINI 940 connected.
- Keep the GPS-MINI 940 turned on for at least 10 minutes first time. This will allow for the fast satellite acquisition in subsequent power-ups.

**IMPORTANT:** This procedure may need to be repeated if the unit has not been used for a prolonged period of time.

#### Installation for the GPS-MINI 940 and TX Wireless Radar Detector (TX WRD)

The GPS-MINI 940 issues audible messages during power-on and self-testing. The TX WRD is also equipped with an auto power sensor used to power the unit. When the vehicle's engine is turned on, the power of TX WRD will be turned on automatically. The TX WRD contains function sensors of detection so proper mounting and orientations are important.

#### Note:

To power the TX WRD, use the 12 Volt power cord provided to connect with battery or ACC Fuse box.

1. Screw the red wire(+) and the back wire (-) to the back side of TX WRD marked with (+) and (-).



(+)Positive (-)Negative



Vertical Installation



## GPS-MINI 940 + TX WRD

### TX Wireless Radar Detector Installation

2. Screw the bracket to the TX WRD.



Bracket and screws used for fixing



Dash Bracket installation for TX WRD to be set steadily on car

3. To fix the TX WRD with an adjustable and a two-position bracket for detection operation to the lower position or to the upper position of the bumper for a less visible profile from the outside.



Installation on A or B inside Bumper Extension if no Chrome Trim

4. Take the fuse out of the small box of battery power cord before the installation.



5. Connect the positive wire marked with a tag(+) of the DC power cord to the 2A fuse which is controlled by the ignition switch.

## CONQUEROR SERIES

### TX Wireless Radar Detector Installation



The negative pole first installation and then the positive electrode

6. Connect the negative(-) of the wire to the chassis of the vehicle. Body paint may need to be removed to assure a good ground connection.
7. Replace the 2A fuse into the small box of the battery power cord.

#### • Mount TX WRD

To connect with the 12 Volts battery, the fuse box hard wiring is recommended.

If you are unsure about making this connection by yourself, please contact a professional installer. RAYEE Tech. Ltd. is not responsible for any damages due to the result of improper installation.

#### TX Wireless Radar Detector (TX WRD) power ON

In order to turn ON the TX WRD, you must turn ON your vehicle's engine. The TX WRD has a micro sensor to detect power pulse and noise and determine if its power can be turned ON or not. The TX WRD would work only when the vehicle's engine is ON.

The GPS-MINI 940 is ready to go. Just simply plug it in and turn it on. You can easily select 11 features for your preferences by pressing the MODE button for 3 seconds.



## GPS-MINI 940 + TX WRD

### How to setup for preferences?

#### Alarms for disconnection

When the GPS-MINI 940 connects with the TX WRD, the "W" twinkles every 2-3 seconds. If the star icon is fixed and stops twinkling, it means that the units are not connected properly. There will be a message which is "Wireless Radar Detector is disconnected" announced every 90 seconds until the units are connected normally.



TX WRD connect successfully

#### Power ON Indication

After the start-up sequence of GPS-MINI 940 going through completely, the FND will show: a flash star in the center of compass indicator and an accurate local time. The sequence issues the driving mode and detection sensitivity level to indicate the sensitivity mode selected. The GPS-MINI 940's signal indicator provides a visual indication when the unit is receiving satellite signals successfully. You can see that there are two flashing points within the time indication.

#### Note:

To receive satellite signals successfully, the top of the GPS-MINI 940 must have a clear view of the sky. When the two-point within the time indication remains fixed on the FND, it means that the satellite data is not received. Once the data is received, the two-point will start flashing within the time indication. Please notice that insulating films such as Instaclear® and ElectriClear® will affect the Satellite reception.



Satellite connect successfully

## CONQUEROR SERIES

### How to setup for preferences?

Check information by pressing the MODE Button for 1 second

When selecting, all functions are programmed to turn in a cycle. If there is no following action taken for about 5-6 seconds, it will return to the standby condition.

#### 1. Current Position – checks the current position

The longitude, latitude and altitude will be displayed on the FND. This allows you to instantly check your position without looking at a map when you are in an emergency. This function would help you to be easily located. The position will be shown only when the unit connects with satellites.

#### 2. Satellite Condition – the satellite condition checking

Sometimes the GPS device is dysfunctional. It is not necessarily out of order. It could be a bad communication with satellites. This function allows you to check the satellite condition upon the sky. The condition will be displayed : (Weak), (Normal), and (Excellent)

#### 3. Current time – the current time and date checking

To check the local time, you must select the correct time zone. The local time will be shown only when the unit connects with satellites.

#### 4. Battery Power – the car's battery checking

When the power of battery is under 11.0 volts, a warning message is given – "the battery is too low."

#### 5. Download Mode – the camera sites upgrading

New camera locations might be added to the unit at anytime and anywhere. Users are able to download and upgrade the latest camera sites' datum.

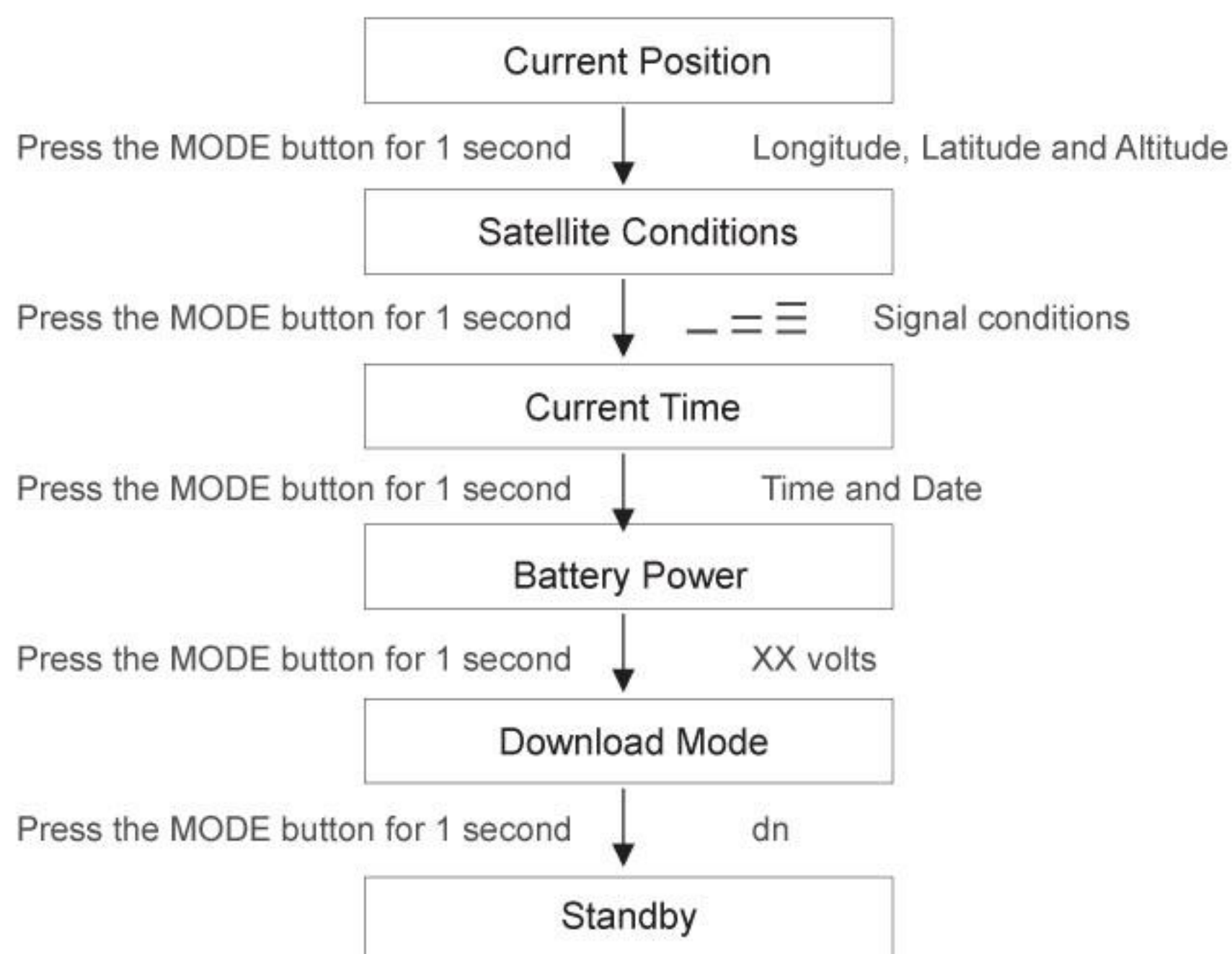
#### Note:

When checking the information on the statuses of Current position, Satellite condition and Current time, the unit must connect with satellites.



## GPS-MINI 940 + TX WRD

### How to setup for preferences?



### Users' Settings for Preferences

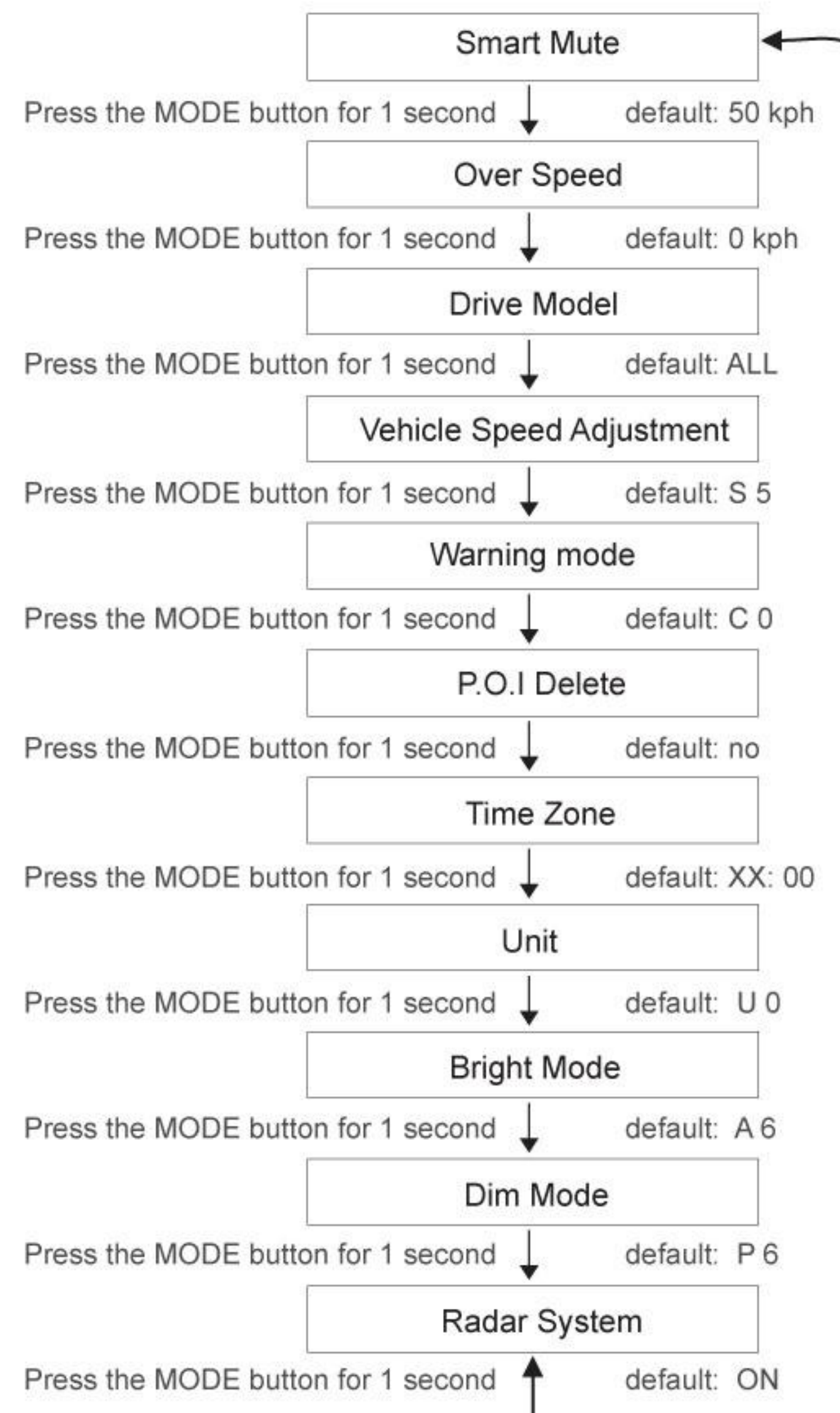
When selecting, all functions are programmed to turn in a cycle. If there is no following action taken for about 5-6 seconds, it will return to the standby condition.

To enter into the function of setting, press and hold the MODE button for 3 seconds. And then, you are able to select any functions by pressing the MODE button for one more time and choose the setting by pressing the UP or DN button. The setup will be finished successfully after 3-5 seconds.

Up ▲ (selection) +10km/hr  
Down ▼ (selection) -10km/hr

## CONQUEROR SERIES

### Users' Settings for Preferences





**Stand by status**

During the stand by status, there are indications of position (compass), radar bands and time on the FND.

1. Position (East, West, South and North) with a star icon
2. the Radar band (X,K,Ku,Ka,L)
3. Time (Real time/Distance/Speed)

**1. Smart Mute**

The GPS & radar detector indicator provides a visual acknowledgement that the detector is rejecting a false signal that has been stored in memory using the True-speed counter feature. Your TX WRD has a Smart Mute feature. If your speed is under the limit which has been set up and stored in the memory, the false alarms will be rejected because the Smart Mute function will be activated. For example, if you are driving under the speed limit of 50 km/per that has been set up in the system; the false alerts will disappear automatically. You can see your speed on the FND.

**How to change the speed setting for the Smart Mute?**

1. Press and hold the MODE button for about 3 seconds.
2. To select speed settings from 0 to 150 k/hr (m/hr) by pressing the UP or DN button. Pressing the UP or DN button allows you to add or reduce 10 k/hr (m/hr) each time.
3. The speed setting will be done successfully after releasing the UP or DN button for few seconds.

**Note:**

The default is 50 kph. The Smart Mute will be ON when traveling under 50 Kph. If you prefer, you can turn the Smart Mute feature off.

**2. Over Speed Alert**

This feature allows you to instantly check if your speed is over the limit without looking at your speedometer. If your speed exceeds the setting selected and programmed in the Over Speed alert, the GPS-MINI 940 will display a visual indication of your speed on the FND. Moreover, a warning message which is "Over speed! Slow down" will be given continuously.

**Stand by status**

1. Press and hold the MODE button for about 3 seconds, and then select the Over Speed.
2. To select speed settings from 0 to 150 k/hr (m/hr) by pressing the UP or DN button. Pressing the UP or DN button allows you to add or reduce 10 k/hr (m/hr) each time.
3. The speed setting is done after releasing the UP or DN Button for few second.

**Note:**

The default is 0 kph. The over speed alert will be ON when traveling over the speed limit. To make sure the Over Speed alert is turned ON, please check the speed setting on the FND. If you prefer, you can turn the Over Speed alert feature off.

**3. Drive Modes**

To reduce false alerts would come from the parallel sites or the bridge above, this unit features three modes which are ALL Mode, LO Mode and HI Mode for users to select according to the camera database of speed limits. Factory default is All mode.

**\* ALL Mode :**

The unit will warn you when driving in any speed and approaching to camera sites programmed in memory. The unit alerts users to photo-enforced intersections and roads with fixed red light and speed cameras.

**\* LO Mode :**

This unit will warn you when you are approaching to fixed camera sites and driving in the speed under 70 k/ph. In other words, if you are approaching to the camera sites and driving over 70 k/ph, the unit will not warn you.

**\* HI Mode :**

This unit will warn you when you are closing to fixed camera sites and driving over 70 k/ph. In other words, if you are approaching to the camera database and driving under 70 k/ph, the unit will not warn you.



**Stand by status****4. Vehicle Speed Adjustment**

The vehicle's speed is calculated by the tire's revolution rate. However, it is not accurate when a car is running at a high speed. In order to reduce the drivers' confusion; it functions to adjust GPS's speed to match the speed with the speed meter.

**5. Warning mode**

The GPS-MINI 940 provides 3 ways of warning mode which are a voice, a tone and a voice with tone to users for alerts and confirmations of program settings. The 3 modes are [C 0] Over speed alerts with vocal messages and tones, [C 1] Over speed alerts with vocal messages only and [C 2] Over speed alerts with vocal messages and continuous tones. The Factory default setting is [C 0].

**6. P.O.I. ( Point of Interest) deletion**

A particular user location can be deleted by pressing the UP or DN button when selecting the POI delete feature. The number of the location selected for deletion will be shown on the FND.

\* Delete all P.O.I. locations

There is an alert showing on the FND before deleting all the P.O.I. locations. To delete all P.O.I. locations, press the MOD Button for about 3-5 seconds.

**7. Time zone**

Used to announce the hourly time according to different time zones. Users are allowed to select their local times when the unit connects with satellites.

**8. Unit**

The GPS-MINI 940 provides both Metric (MPH) and English (KPH) systems for displaying the vehicle speeds.

**9. Bright**

The display should be bright during the day due to the sunlight. The Bright Mode allows you to adjust the display automatically according to the time setting. The range of time setting is from 0:00 am to 12:00 am.

**Stand by status****10. Dim**

The display should be dim during the night. The Dim Mode allows you to adjust the display automatically according to the time setting. The range of time setting is from 0:00 pm to 12:00 pm.

**11. Radar System disconnect alarms**

It functions to warn you when the GPS-MINI 940 is disconnected with the TX Wireless Radar Detector. A vocal message will be spread out every 90 seconds until the two devices are connected. However, the GPS-MINI 940 can be used independently and its alarm setting for disconnection must be turned off. The Factory default setting is ON.

Note:

When the function of Radar System is turned OFF, all band icons will be ON.

**Other Special Functions****1.1 Safety driving & Camera mode**

When Safety driving mode is On, All types P.O.I signals are detected and an alert is given. During P.O.I alert unit MINI 550 continues to detect other radar signals. Factory setting is Safety Alert On. When camera mode is on, only camera database are detected and an alert is given.

**1.2 Warning for low Battery Power**

When the power of battery is under 11.0 volts, a warning message will be given – "the battery is too low". The unit provides this friendly function to users at all time. Factory default setting is ON for the low battery power.

**1.3 Save P.O.I**

The GPS-MINI 940 can store up to 255 user location alerts set to give hazard warnings not known to the unit. When approaching a stored location, the display shows with the distance reducing. In addition, a unique tone sounds as vehicle approaches location. A voice alert sounds if the Voice Alert is activated.



**Other Special Functions**

The "POI" button allows you to mark a specific location and label it for future reference. Once marked, the GPS-MINI 940 will provide an alert with an arrow indicating the direction of the location when you reach this area again. This can be extremely useful when there are known speed traps or camera locations that you would like to remember.

**1.4 The detection capability of TX Wireless Radar Detector**

The TX Wireless Radar Detector includes a full coverage of X, K, Super Wide Ka, Narrow Ka including European Narrow Ka band, and Laser detections. The wireless radio frequencies are applied for the communication from the TX Wireless Radar Detector to the GPS-MINI 940.

The TX Wireless Radar Detector includes a full coverage of X, K, SuperWide Ka, Narrow Ka (including European Narrow Ka-band), front laser detection, and digital signal processing for superior range and fewer false alarms. These device applies for wireless radio frequencies to send communication info from TX (WRD) to RX(GPS-MINI 940).

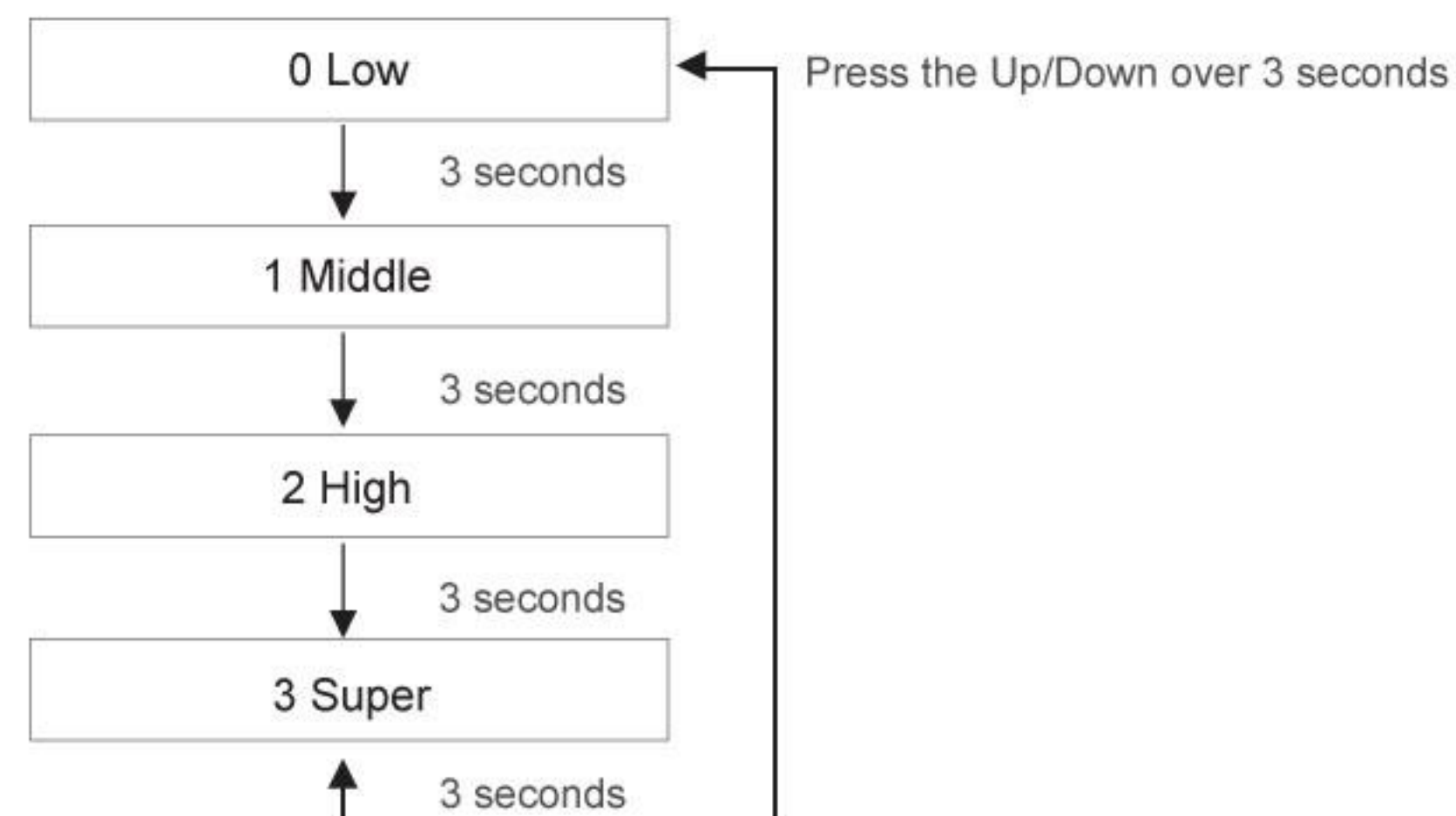
**Pop Mode Detection:** The instant-on TX Wireless Radar Detector has a protection to against "Pop Mode" radar which is a relatively feature for radar gun manufacturers. It works by transmitting an extremely short burst, within the allocated band, to identify speeding vehicles in traffic. Once the target is identified, or "popped", the gun is then turned to its normal operating mode to provide a vehicle tracking history.

**1.5 Sensitivity level adjustment**

You can change the detector's sensitivity to reduce the annoyance from all band intrusion alarms and motion sensors by selecting the levels from low to super according to your driving area. The default setting is on High.

**1.6 Connecting by the Radio Frequency 390 MHz**

To make sure the TX WRD connecting with the GPS-MINI 940, turn on the vehicle's engine and the GPS-MINI 940. You can see the GPS indicator provides a visual acknowledgement that the TX WRD is connecting with the Radio Frequency 390 MHz.

**Other Special Functions**

**The Mini 550 Indicator would work only if the GPS-MINI 940 is connected with TX WRD**

The accurate time, speed and heading direction of driving will be shown on the indicator when the unit is connected with ? properly.

**The original settings can be restored.**

The factory default setting will be activated by pressing the mode button key.

**Where to upgrade the firmware and database?**

The international websites provide the firmware, the languages for the voice and the latest database. Please check your local server in the following paths:

<http://update.gpscamera.org>